Washington Department of FISH and WILDLIFE

Washington Hunting News

FREE

Game Trails/Hunter News 2004

Should Human Disturbance Be Regulated on Winter Range?

The importance of winter range to viability of deer and elk populations has long been recognized. Many of the State Wildlife Areas in eastern Washington were originally purchased specifically to protect wintering wildlife. In fact, over 75% of the critical winter range for the Yakima and Colockum elk herds are in a WDFW wildlife area.

While much of the winter range is protected from development, it is not free from disturbance. Washington currently has few restrictions that limit human use on big game winter range. The impact of people on the winter range to health of individual animals and the productivity of the herds are difficult to measure. An animal in good physical condition may not be measurably impacted while one with little remaining fat may struggle to survive from burning precious energy while avoiding disturbance. One thing that is obvious, human disturbance changes distribution of elk on winter range. As human activity increases in the late winter and early spring, elk start seeking refuge in low disturbance areas. Some of these "refuges" are private lands, where elk may not be welcome.

Some other Western states are more restrictive than Washington in protecting wintering animals. Wyoming, Montana, Oregon and Idaho have all limited access to critical state owned winter range. Wyoming and Montana are the most restrictive and generally prohibit all public entry to state owned winter range. Wyoming and Idaho also unsuccessfully attempted to restrict shed antler hunting as a means of protecting wintering wildlife and instead completely closed access on portions of these state managed areas.

Elk on the winter range Photo: Scott McCorquodale

WDFW in cooperation with state, federal and private landowners have implemented a limited number of motorized vehicle road closures that are designed to protect wintering deer and elk. So why does Washington seem so tolerant of public use on winter range? Thirty years ago, there probably wasn't much of an issue. Human populations were lower, snow and mud made access difficult, and there was no compelling reason for people to be out on the winter range.

Washington's population has increased by over 2.6 million and ATV's have made access easier. However, the biggest reason has probably been the recent changes in hunting regulations that have resulted in increased numbers of mature male deer and elk with antlers. Hunting for shed antlers has become an increasingly popular pastime. Shed antlers, especially matched pairs, have an economic value that is also rapidly escalating.

As Washington's human population continues to expand and more people seek shed antlers, it has become obvious that wintering wildlife needs greater protection. There is probably no one regulation for all winter ranges. Motorized vehicle restrictions may only be needed in some areas while complete closures required in others. Potential closures will be discussed more in the coming months. If you have an interest in this issue, you are encouraged to voice your opinion.

Jeff Bernatowicz
District Wildlife Biologist

Big Game Mandatory Reporting of Hunting Activities

A significant role of the Washington Department of Fish and Wildlife (WDFW) is developing a partnership between agency professionals and the user public. Annually, agency biologists collect and analyze data using the best available information and applying scientific principles to manage the fish and game resource. A key element in this annual cycle is hunter reporting of big game harvest and hunter effort information in a timely fashion. Dave Ware, Game Division Manager said, "This link between the agency and hunter is critical for the proper management of all hunted species. The department goes through great lengths and expense using hunting license fees to collect hunting activity information every year. When "Mandatory Reporting" was initiated for the 2001 hunting season, we were encouraged by the quality and quantity of data received compared to previous years when a more cumbersome and expensive hunter survey was conducted months after the hunting seasons had ended and often too late for use in developing and adjusting hunting seasons in April."

Mandatory reporting rates for deer, elk and turkey hunting activity have been decreasing every year since the requirement was initiated. "In order to maximize the functionality of the mandatory reporting system, a 90% reporting rate by the January 31 deadline is needed," Ware said. Reporting rates were 70% in 2001, 66% in 2002, and 65% in 2003. These low reporting rates result in reduced accuracy of harvest estimates at the game management unit level and difficulty in determining the impact of hunting season changes. Currently, hunters who fail to report their activity are guilty of a misdemeanor violation. However because this was a new requirement, no tickets have been issued. Instead, the department has encouraged hunters to comply and has even provided 4 elk and 5 deer incentive permit drawing for those reporting on time. "Unfortunately, the results of our efforts in providing incentives to motivate hunter reporting have not been successful," Ware said.

Rather than the current misdemeanor violation, WDFW is considering not allowing hunters who fail to report by the deadline date to purchase hunting licenses for the subsequent year. This proposal contuinues to require hunters, whether they hunted or not or were successful in harvesting an animal or not, to report. However, having failed to report, we are proposing that a hunter may pay an administrative fee to get back into the system and regain the privilege of purchasing a hunting license. The intent is twofold, increase compliance in reporting and essentially de-criminalize failure to comply.

George Tsukamoto,
Wildlife Biologist

After the hunt Daniel Mock will report his hunting activities. Photo credit: Kevin E. Vaughn

Game Division Message

What do you think? There are many issues or new initiatives discussed in this 2004 edition of Game Trails. We encourage you to voice your concerns about any or all of them.

We will also be discussing hunting season and game management issues over the next two years leading up to a new three year package in April 2006. If you would like to be more active with the Washington Department of Fish and Wildlife, there are many ways to have your voice heard. If you would like to be placed on our mailing list or to comment on issues, you can send us an email at wildthing@dfw.wa.gov or mail us at: Wildlife Program, Washington Department of Fish and Wildlife, 600 Capitol Way North, Olympia, WA 98501, or keep tabs on our web site at: http://wdfw.wa.gov/huntcorn.htm.

We need your ideas to strengthen our management of game animals and the types of seasons we craft, so please get involved.

Thank You!

Washington's Chronic Wasting Disease Program– An Update

Chronic wasting disease (CWD) of deer and elk continues to be an issue of great interest to hunters, wildlife managers, and the general public. It is a condition seen in mule deer, white-tailed deer, and elk that was first described in Colorado and Wyoming over 30 years ago. CWD is characterized by clinical signs such as weight loss, abnormal behavior including indifference to human activity, difficulty walking, tremors, hyper-excitability, excessive salivation, teeth grinding, difficulty chewing or swallowing, and excessive drinking and urination. It is always fatal in affected animals. There is no vaccine, treatment, or practical live animal test available for CWD.

The Washington Department of Fish and Wildlife (WDFW) began testing deer and elk for CWD in 1996. From 1996-2000, efforts were focused on testing animals that showed clinical signs consistent with CWD ("target animals"), such as emaciation and other characteristics as described above. Beginning in 2001, WDFW began a more intensive surveillance program for CWD, focusing on animals harvested during the fall hunting seasons. This approach relied on the efforts of over 100 WDFW employees and volunteers and the cooperation of hunters and meat processors. Volunteer groups such as Eyes in the Woods and the Inland Northwest Wildlife Council contributed greatly to these efforts. All of the 2,288 usable samples collected since 1996 have tested negative for CWD. However, more testing is required before we can conclude with a high degree of confidence that Washington is free of CWD.

As of June 2004, CWD has been diagnosed in wild deer and/or elk in the states of Wyoming, Colorado, Utah, New Mexico, Nebraska, South Dakota, Wisconsin, and Illinois and in the Canadian province of Saskatchewan. CWD has been diagnosed in captive deer and elk in the states of Montana, Wyoming, Colorado, South Dakota, Nebraska, Kansas, Oklahoma, Minnesota, Wisconsin, and the Canadian provinces of Alberta and Saskatchewan.

CWD is believed to be most commonly spread from animal to animal through direct contact; most likely via the saliva, urine, and feces of infected animals. CWD can also be transmitted by exposure to environments that have been contaminated by infected animals or their carcasses. The risk that carcass parts of animals could contaminate the environment has led some states and provinces to impose restrictions on the importation of certain hunter-killed deer and elk parts from outside areas. WDFW currently requests that hunters who harvest a deer or elk from an area where CWD is known to occur have their game processed in that area and only bring meat and carcass parts that have been thoroughly cleaned of all nervous and lymphatic tissue back to Washington. WDFW plans to make this recommendation into a regulation.

NEW RULES BEING CONSIDERED

To minimize the risk that CWD could be imported into Washington via infected carcasses, WDFW is considering implementing regulations that would restrict the importation of certain deer and elk parts from states and provinces where CWD is known to occur. These regulations may be put into effect as early as this fall. For areas where CWD is present, the following import regulations are being considered. Only the following are allowed into the state.

·Meat that is cut and wrapped either commercially or privately
·Meat that is boned out
·Hides (capes) with no heads attached
·Skull and antlers that have been cleaned of all meat and tissue
·Upper canine teeth known as buglers, whistlers or ivories that have been cleaned.
·Finished taxidermy mounts

In addition, if a hunter is informed that an animal he or she hasharvested in another state tests positive for CWD, the hunter will be required to notify WDFW immediately.

The public may comment on these proposed rules at the August 6 & 7 Fish and Wildlife Commission meeting.

CWD belongs to a class of diseases known as transmissible spongiform encephalopathies (TSEs). This class of diseases also includes scrapie of sheep and goats, bovine spongiform encephalopathy (BSE, or "mad cow disease") of cattle, and Creutzfeldt-Jakob Disease (CJD) of humans. CWD is only known to occur in mule deer, white-tailed deer, and elk. While BSE has been linked to the development of a particular form of CJD (termed variant Creutzfeldt-Jakob Disease, or vCJD) in humans, there have been no links between CWD and human disease. In this respect, CWD appears to be more similar to scrapie of sheep and goats, which has never been associated with human disease despite being present in sheep and goat populations for over two centuries.

WDFW currently requests that hunters who harvest a deer or elk from an area where CWD is known to occur have their game processed in that area and only bring meat and carcass parts that have been thoroughly cleaned of all nervous and lymphatic tissue back to Washington. WDFW plans to make this recommendation into a regulation.

In 2003, a cluster of human CJD cases was reported in the state of Washington in hunters who consumed venison. Subsequent investigation by the Washington Department of Health and the U.S. Centers for Disease Control revealed that all three had died of sporadic CJD (not vCJD), and that there was no evidence to conclude that the development of their disease was related to their consumption of venison. Several other alleged CJD clusters in humans who consumed venison have been investigated throughout the country by the U.S. Centers for Disease Control. In all cases, investigations revealed that the people had died of either a non-TSE neurological illness or of sporadic CJD and were not related to CWD.

WDFW plans to continue testing hunter-harvested animals for CWD, with the goal of collecting between 700-1000 samples per year. Beginning with the 2004 hunting season, more emphasis will be placed on collecting samples from areas of the state where relatively few samples have been collected to date. Hunters who regularly hunt in some of these areas may be contacted and asked to voluntarily assist WDFW with its sampling efforts by either bringing their deer or elk head in for sample collection, or collecting the necessary samples themselves and sending them to WDFW.

Kristin Mansfield DVM
Wildlife Veterinarian

HUNTERS CAN HELP

You can help by doing the following:

·Observe the guidelines if hunting in a state where CWD is known to occur
·Properly dispose of waste from deer and elk carcasses, regardless of where harvested (contact your local solid waste management department for details)
·Report any deer or elk exhibiting clinical signs of CWD to your nearest WDFW office
·Cooperate with WDFW employees or volunteers if asked for a sample from your deer or elk

Wildlife Health Issues in Washington State

Black-tailed deer hair loss syndrome
A definitive diagnosis as to the underlying cause of the hair loss syndrome in black-tailed deer may be near. Dr. James Mertins, an entomologist with the USDA's Animal and Plant Health Inspection Service, has identified the lice which are causing west side black-tailed deer to rub, chew, and lick their hair out, as Damalina cervicola, an exotic (non-native) species.

Early on it was evident that hair loss deer were suffering from an intense dermatitis caused by large numbers of biting lice. Previously parasitologists identified the lice as Damalina bovicola, the common and native deer louse. Whereas lice are not uncommon on black- tailed deer, it is believed that louse numbers only increase to harmful levels when the deer's immune system becomes stressed by nutritional deficiencies, debilitating disease processes, or heavy internal parasite loads. Our attempt to identifythis unknown stressor has been the focus of our research.

Damalina cervicola is a louse historically found on old world ungulate hosts. According to Dr. Mertins, D. cervicola was first recognized in southeastern United States fourteen years ago. D. cervicola may have entered Washington in conjunction with the influx of large numbers of exotic deer in the 1980's. According to biologists, a new parasitic species will be much more damaging to a host than a similar parasite with which the host has been associated for centuries.

We are continuing to submit lice collected from hair loss deer residing in various locations around western Washington. If we continue to extract the exotic louse (D. cervicola) from the deer suffering from hair loss syndrome, we may soon be able to say with confidence that the exotic louse is the cause of the black-tailed deer hair loss syndrome.

West Nile Virus
Working in conjunction with the Washington State Departments of Health and Agriculture, the Department of Fish and Wildlife was braced for the serious epidemic of West Nile virus infection that was anticipated last summer. To the dismay of epidemiologist and the delight of everyone else, the expected epidemic did not materialize. With the arrival of mosquito season we are again vigilant for signs of West Nile virus infection.

The West Nile virus belongs to a group of viruses known to cause encephalitis, a potentially fatal inflammation of the brain and spinal cord. The West Nile virus is known to primarily affect birds, horses and humans. Mortalities in other species have been documented. Of major concern to the Department of Wildlife are the reports of mortalities from West Nile virus in sage grouse in Wyoming, Montana and Alberta. In 2003, a total of 27 sage grouse were confirmed to have died from West Nile virus; 19 in Wyoming, 3 Montana and 5 Alberta, Canada. They were found by researchers tracking radio-collared sage grouse on four different studies. This is a brand new issue in sage grouse conservation and the effect that West Nile virus will have on sage grouse populations across their range is not yet known. Surveillance efforts conduced by the National Wildlife Health Center revealed West Nile virus in doves, pigeons, pheasants, wild turkey, ruffed grouse, mallard and Canada geese. To what extent the populations of these species are being impacted is unclear at this time.

Sage Grouse may be threatened by West Nile virus
Photo: WDFW

Avian Influenza
The recent outbreak of Avian Influenza in British Columbia is cause for great concern to the poultry industry. Many wild bird species may be infected with the avian influenza viruses. The virus is often found in waterfowl. Virulent viruses that cause serious disease in domestic fowl do not cause disease in waterfowl. Likewise avian influenza viruses do generally not affect upland birds.

Briggs Hall DVM
Kristin Mansfield DVM

Washington Hunting News Game Trails

is published annually by the Washington Department of Fish and Wildlife and is provided free of charge. Address all communications regarding this publication to:

Game Trails
Washington Department of Fish and Wildlife
600 Capitol Way North
Olympia, Washington 98501-1091.

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Hunter Access to Private Lands

Access to private lands has been an important issue for hunters for a long time. It was confirmed again during the formation of the 2003-09 Game Management Plan. Hunters want the Washington Department of Fish and Wildlife (WDFW) to develop programs to expand access. They also said that they support providing incentives including leasing property from private landowners and that they are willing to pay for it.

This demand for expanded access programs comes at the same time federal funding for Washington's access program was cut by over 50%. Currently the hunter access program is active mainly on eastern Washington farm lands. Maintaining and expanding hunter access will require expanded funding.

A comprehensive review of WDFW hunter access programs is being conducted in three phases. The first phase was a review of a ten year pilot Private Lands Wildlife Management Area (PLWMA) program. The second phase was just completed which was an update of WDFW's long standing Feel Free to Hunt, Register to Hunt, and Hunt by Written Permission programs. Summaries of these reviews and updates are captured in subsequent articles. The third and final phase is the development of new programs.

Hunter Access Task Groups made up of conservation organizations, landowners, and hunters have guided all three phases. The Final phase proposed new programs, is nearly ready for public review. Watch the Departments website, news articles, or public meeting announcements for your opportunity to comment.

Dave Ware
Game Division Manager

Private Lands Access Review and Update

The Washington Department of Fish and Wildlife (WDFW) has completed a program review of current private lands access programs. The focus of this review is on the Feel Free to Hunt (FFTH), Register to Hunt (RTH) and Hunt Only by Written Permission (HOBWP) programs.

FFTH program private lands are those that are posted with signs allowing hunters who find these areas to freely access them. There is no need to contact the landowner and the lands are not advertised other than by posting. Hunters generally find these areas by scouting before the season or during the season.

RTH program private lands are those that are posted with signs and all who use these sites are required to self-register and possess a permission slip. A completed registration requires the following information; date, name, address, and car license plate number. Some locations require parking in designated areas, which may limit the number of participants at any given time.

HOBWP program private lands are posted with signs designating the area as hunt by written permission only. The name of the landowner and contact phone number are printed on the signs. It is the hunters responsibility to locate these private lands by scouting before or during the season. The landowner provides written permission slips specifying dates, species hunted, areas off limits, etc.

To aid in the program review a landowner and hunter opinion survey was conducted by Responsive Management of Harrisonburg, Virginia under contract with WDFW. The landowners surveyed were those enrolled in the WDFW posted hunt private lands access programs described above. The hunters surveyed were those that actually used or attempted to use the sites during the 2003-hunting season. To review the results of the survey go to the hunting page of WDFW's website at: http://wdfw.wa.gov/

WDFW has decided to retain all three of these programs, with some modification. The most significant change that hunters will see is the availability of maps that indicate the location of lands on the program. These maps will be available beginning in September and will be computer based to accommodate annual changes. Access to the maps will be from WDFW's website at http://wdfw.wa.gov/, hunters will be able to customize the map for the area they hunt and either print it on their own printer or save it to a CD and take it to a local print shop such as KINKO's, where it can be printed in larger formats.

George Tsukamoto
Wildlife Biologist

Private Lands Wildlife Management Area (PLWMA) Program Status

The Private Lands Wildlife Management Area program has been in existence for more than a decade as a trial program. The Washington Department of Fish and Wildlife (WDFW) recognized the value of private lands to fish and wildlife populations and to recreational users, especially hunters. PLWMAs were developed to provide incentives to landowners for enhancing wildlife populations, improving habitat and allowing hunter access.

At the request of the Washington Fish and Wildlife Commission, a review of the PLWMA program was initiated in 2002. A stakeholder group was organized and charged with developing recommendations to WDFW whether to continue, modify or discontinue the program. As part of the evaluation a symposium was held with experts from Colorado, Montana, Utah and Wyoming sharing their expertise and experience on private lands hunter access programs with the stakeholder group and WDFW in their respective states.

WDFW also conducted a survey of landowners and hunters about the PLWMA program. A majority of hunters agreed that a PLWMA type program should be continued and expanded to more private lands. Most of the criticisms about the PLWMA program were not shared by those who participated in the survey. In fact, a majority of hunters surveyed strongly or moderately supported using license revenues to fund private lands access and habitat enhancement programs. See WDFW website for the survey results at: http://wdfw.wa.gov/wlm/plwma/washington_plwma_opinions.pdf.

However, Washington Treaty Tribes raised concerns about the PLWMA program, stating that it is inconsistent with the treaty hunting rights to hunt on "open and unclaimed lands" and their role as co-managers of fish and wildlife harvest.

The WDFW is planning to continue with the three trial PLWMAs through the 2005 hunting season after which the program will be changed to address the concerns raised by Tribes and other issues. A comprehensive Private Lands Partnership (PLP) program is being developed that provides opportunities for WDFW to work cooperatively with landowners who are willing to provide hunter access.

George Tsukamoto
Wildlife Biologist

DROUGHT IMPACTS

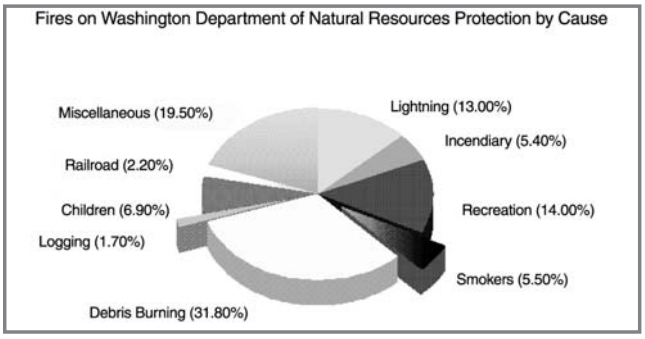
Forest landowners fear that the warm, dry spring in 2004 could be leading up to tinder dry conditions in the forests and rangelands of the State. Washington Department of Natural Resources (DNR) reported that we are entering our third year of drought, *"Washington's forests are as dry today (May) as they typically are in late July or early August. This year, DNR has already had to fight more than 70 small wildfires, more than three times the usual amount. Many of these fires were human caused, usually the result of debris burning."*

The danger of increased numbers and potential severity of wildfires is a constant worry during drought conditions. The loss of valuable timber resources and other property is a real concern and may result in early and extended closures and restrictions to public access onto public and private lands.

Consecutive years of drought conditions in Washington have compounded the problem. While mild winter conditions have resulted in easing the stress and mortalities to wildlife over the winter months, continued drought conditions could lead to additional stress and mortalities to wildlife during the summer and fall seasons. If animals enter the winter in poor condition than over-winter mortality rates can be expected to rise even under normal winter conditions.

Early fall closures of private timberlands because of fire danger is not unusual in Washington. What is unusual this year is the potential severity of conditions that could heighten the risk. According to DNR statistics most fires, occurring under their protection, are man caused. Lightening strikes only account for 13% of the total.

HUNTERS ARE ALWAYS ADVISED TO BE CAREFUL IN THE OUTDOORS, ESPECIALLY UNDER THESE EXCEPTIONAL CONDITIONS.



Moose Status and Hunting in Washington

The moose in Washington are Shiras moose, also known as the Yellowstone or Wyoming moose (Alces alces shirasi), which is the smallest of the four subspecies of moose in North America. The North American range for Shiras moose today includes Colorado (introduced), Wyoming, Montana, Utah, Idaho, Washington, southwestern Alberta, and southeastern British Columbia.

Moose presence was first documented within the state in 1954 when a shed antler was found at Sema Meadows and in 1955 a yearling cow carcass was found on Kalispell Creek in Pend Oreille County. Even as recently as 1965, Lloyd Ingles, a renowned mammalogist reported no known population in the Pacific States (WA, OR, CA). Today, moose inhabit primarily northeast Washington including Spokane, Pend Oreille, Stevens, and Ferry counties. Moose have also been observed in Lincoln, northern Okanogan, Whatcom counties and recently in the Blue Mountains of southeastern Washington.

Probably due to widespread timber harvest and forest regeneration in northeast Washington the moose population steadily increased from the 1950s, through the 1970s. In 1972, Richard J. Poelker, a Department Biologist estimated a resident population of 60 moose in the state. Moose dramatically increased in numbers and distribution after 1972. By 1977 the Department opened a limited permit-hunting season and awarded three tags.

The annual tag number remained at three from 1977 through 1984. As the moose population continued to grow from 1985 through 2004 tag numbers gradually increased from 4 to 96 tags. The Washington Fish & Wildlife Commission approved 96 moose tags for 2004, which is the highest number ever allotted. The drawing odds in 2003 were about 1 in 120 applicants.

Annual moose harvest has lagged not far below the number of tags allocated. Harvest success rate has ranged between 67% and 100% with the average success exceeding 90%. Last year (2003), 87 moose were legally harvested including 61 bulls and 26 antlerless animals.

Since the early 1970s the WDFW has monitored the state's moose population through ground-based counts, track and fecal pellet surveys, and aerial censuses. The WDFW now surveys moose by helicopter. Bull and calf ratios from early winter helicopter surveys have ranged from 70 to 128 bulls and 26 to 74 calves per 100 cows. Bull ratios have remained remarkably high through the years.

The average age of bulls harvested has ranged from 3.9 to 6.9 years from 1992 through 2002. The mean age of all bulls harvested since 1992 is 5.3 years, an age considered being an adult bull. The antler spread of 207 harvested bulls ranged between 35 and 41 inches from 1992 through 2002. The average antler spread for these years is 37 inches with the widest spread reported to be 58 inches.

Hunters should note that moose are fairly common in the mountains of northeast Washington, but also tend to be solitary by nature. They seek out the cooler, moister drainages and northerly slopes. While they can be found at any elevation, they are most likely found in the 3,000 to 5,000 foot elevation range. In the fall they prefer browse, primarily willows that grow in brushy forest plantations or in burns that are 15 years old or older. In the fall and early winter moose seem to seek out snow, rather than avoid it.

Moose rut in October and some hunters have been effective with calls. Early in the season moose are widespread and snow is usually not available for tracking. Access is good and many hunters take moose in October. By November the deciduous trees and shrubs have lost their leaves, which improves visibility for glassing. In addition, snow helps locating tracks as well as seeing this dark animal against a white background. By mid to late November there is usually enough snow to be concerned about access. Hunters in Washington generally have to put in 7 to 14 days of hard hunting to harvest a moose. Of course the real work begins after a moose is down!

The Colville National Forest travel map is highly recommended and available at Ranger Stations in Newport and Colville. Washington Department of Natural Resources (DNR) maps are also recommended, especially for Game Management Unit # 121. There is a DNR regional office located in Colville.

Dana L. Base
Associate Wildlife Biologist

Moose are more visible with a snow background Photo: Dana Base

Mt. St. Helens Wildlife Area, Winter Elk Mortality Survey

On May 5, 2004, Washington Department of Fish and Wildlife (WDFW) Region 5 Wildlife staff conducted an additional winter elk mortality survey on the St. Helens Wildlife Area. This survey is a follow-up to the previous mid-winter survey conducted in February. These surveys are conducted as one component of WDFW's ongoing efforts to evaluate and manage the St. Helens Wildlife Area specifically, and the Mt. St. Helens Elk Herd in general. Approximately 200 elk regularly use the Wildlife Area with as many as 700 gathering there during severe winters. This year's winter mortalities total 22 animals, with members of both sexes and all age classesrepresented. As expected, this places the (2003-04) winter mid-range in terms of severity. In previous years, the range of mortalities has been wide, 6-80 depending on winter severity. The hard work of many volunteers makes this effort possible. Participants in the May mortality survey included members of the Rocky Mountain Elk Foundation, the Mt. St. Helens Preservation Society, and the Northwest Indian Fisheries Council, along with WDFW personnel from Regions 4 and 5.

Olympic Elk Herd Plan Readied for Public Comment

The Olympic Elk Herd is one of ten elk herds identified in Washington. It is located on the Olympic Peninsula, generally north of the Chehalis River and west of Hood Canal. This herd is an important resource that provides significant recreational, aesthetic, cultural, and economic benefits to the people of the state. Based on historical harvest information, elk numbers peaked in this area in the late 1970s with a conservative estimate of about 12,000 elk outside of Olympic National Park.

The purpose of the plan is to provide direction for the management of the Olympic elk resource into the future. The goals for the Olympic Elk Herd Plan are; (1) to preserve, protect, perpetuate, manage, and enhance elk and their habitats to ensure healthy, productive populations, and ecosystem integrity; (2) to manage elk for a variety of recreational, educational, and aesthetic purposes including hunting, scientific study, cultural and ceremonial uses by Native Americans, wildlife viewing, and photography; and (3) to manage the elk herd for a sustained yield.

Management of the Olympic Elk Herd requires close coordination and cooperation with Indian tribes, public and private land managers, and the public. A Cooperative Elk Management Group made up of representative from the Olympic Peninsula tribes and the Washington Department of Fish and Wildlife was established in 1996 in an effort to better manage this valued resource. In view of the fact that elk populations are below goals established in the plan, the Cooperative Elk Management Group worked together with the objective to, "reverse the decline in the Olympic Herd elk numbers and ensure elk populations throughout the Olympic Peninsula are huntable in perpetuity." The cooperative efforts of the group have succeeded in reversing the decline in elk herd numbers but populations are still generally below goals and much more needs to be done.

Priority objectives have been identified to address specific problems in elk management. To accomplish each objective a variety of strategies have been devloped. The new draft of the Olympic Elk Herd Plan will be posted in July on the WDFW Internet web site for public viewing and comment at:

< http://wdfw.wa.gov/huntcorn.htm>

There are many opportunities for hunters and other wildlife enthusiasts to get involved in making this plan a reality. These include participating in composition surveys (through your local elk foundation chapter), developing the green forage program, and working with landowners to plan and install signs and gates. If you would like to find out more about how to volunteer for implementing some of the strategies in this plan, or just want more information, you can call Jack Smith at the Montesano Regional Office(360) 249-1222 or email at smithjls@dfw.wa

Jack Smith
Region 6 Wildlife Program Mgr

Cooperative Elk Transplant to the Nooksack

The North Cascades elk herd got a much-needed helping hand this past fall as part of a joint state-tribal project that moved 42 elk from the Mount St. Helens area to the Nooksack drainage. The extra animals from the first year of this two-year project are expected to jump start the recovery of the Nooksack area elk herd. WDFW Game Division Manager Dave Ware noted "this project was successful because of the team effort from state and tribal staffs and a large number of volunteers from around western Washington." Even the cost of the project was shared between the tribes and WDFW.

The recovery project was initially identified in the North Cascades Elk Herd plan that was completed in 2002. After a series of public meetings to inform the public in both the source area near Toutle, and the receiving area near Sedro-Woolley work on the project started in August. The elk were to be captured in a corral trap. The goal was to keep the family units together in order to reduce the tendency of transplanted elk to move away from their release area. Two 1200-foot long, 8-foot high wings made of metal t-posts, wire and burlap were constructed first. These formed the funnel that the elk would be herded into by a pair of helicopters. Once the elk moved down the funnel into the waiting corral the door was shut behind them. Several weekend work parties of volunteers, including tribal members and a crew from the Toutle High School FFA program, were needed to build the wings.

The capture took place over two days in early October. The elk were slowly herded up the valley and into the funnel keeping them as calm as possible to reduce stress. At the last minute they were rushed into the waiting corral and the door slammed behind them. Each animal was processed into a waiting trailer supplied by members of the Rocky Mountain Elk Foundation from the Bellingham area. State and tribal staff injected antibiotics, took temperatures, and fitted each with a radio collar that will allow state and tribal scientists to track the survival and movement of the relocated animals. Once they were loaded, the trailers headed north. The elk were released well back into the release area. According to WDFW biologist Mike Davison "We wanted to give them plenty of opportunity to take up residence in the timbered areas, rather than moving down into the valleys where they could cause damage to agricultural crops."

Helicoper herding elk into the trap. Photo: WDFW

As of the end of May biologists are still tracking 32 of the transplanted elk. Nearly all of the animals took up residence in the target area and seem to be doing well. While some were lost to predators the program is considered a success. State and tribal staff are now gearing up for the second year of the capture, with a goal of 50 more.

According to Swinomish Tribal leader Todd Wilbur "This is just one example of how the state and tribes can work together to protect and rebuild game populations that benefit everyone." Other state-tribal projects include joint surveys of game populations, cooperation on mountain goat studies, joint participation in recovery planning for Snake River bighorn sheep, and the development of cooperative management plans. The state and tribes from western Washington are currently completing a proposed agreement that will expand and guide these cooperative efforts into the future.

Dick Stone
Wildlife Interagency Policy Lead

Attention Colockum and Yakima Elk Hunters – We need your help!

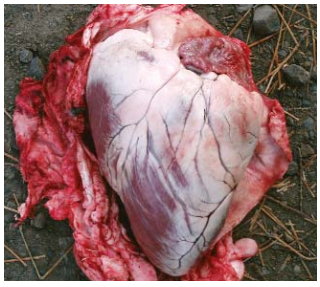
When habitat conditions are good and a cow elk's diet sufficiently nutritious, they can acquire the needed calories and other nutrients to successfully rear a calf. If abundant quality forage is available, they may also be able to store adequate energy reserves (fat) to assure breeding again that autumn. Research has indicated that the probability of successful breeding by cow elk declines rapidly as autumn body fat levels fall below 10%. At autumn fat levels below 5%, cow elk almost never successfully breed.

So, autumn fat levels among cow elk are a good predictor of the likelihood of successful breeding and of prevailing habitat quality. Researchers have found one very good, simple, and inexpensive method to assess autumn body fat is to examine harvested elk for fat levels deposited around specific internal organs… namely, the heart and kidneys. Research has established very good predictive equations providing a link between total body fat and the amount of fat covering the heart and kidneys in elk.

Every autumn, elk hunters take to the field and harvest cow elk These harvested elk can provide important information about elk population well-being and elk habitat quality. Biologists need help from hunters to collect information from harvested cows to make the needed assessment of body condition. Biologists need to examine the amount of fat covering both the heart **and** the membrane covering the heart (the pericardium), **and** they need to assess the amount of fat covering **both** kidneys (See photos). Two additional pieces of information are needed: it is helpful to know the cow's age (was she prime-aged or senile?), and it is important to know if the cow nursed a calf the preceding summer (a skinny cow elk that nursed a calf all summer means something different than a skinny cow that was barren). A tooth from the harvested elk can be used to estimate it's age, and a careful examination of the udder can determine whether the cow nursed a calf during the summer preceding harvest.

WDFW biologists are using just this approach to assess the nutritional status of elk from the Colockum and Yakima elk herds. For the last 2 years, biologists and volunteers have headed afield each autumn to locate successful cow elk hunters and collect data from their elk. Hunters not contacted in the field have been directed to provide the samples (heart, pericardium, both kidneys, an incisor tooth, and an assessment of the udder) at specific, signed drop-off locations. So far, some useful data have been acquired, but WDFW would like to increase sample collection. To date, only a few hunters have participated, and many samples received have been incomplete (for example, a heart but no kidneys…a heart, but no pericardium). Hunter cooperation is the key to success in this endeavor.

Most hunters can locate the heart and it's covering membrane. Hunters can retain their elk hearts after examination by a biologist. The kidneys are slightly more difficult to locate for most hunters; they are found in the back of the body cavity, usually close to the liver. They are oblong, relatively firm organs about 5-6 inches long and are typically covered by considerable fat. Because the assessment requires examining fat surrounding the kidneys, **it is critical that hunters do not trim fat off** the kidneys. Locate the kidneys and carefully remove them with **all** attached fat. Then remove the 2 middle incisor teeth (front teeth, bottom jaw). Finally, either remove the udder for later examination or carefully pull on the teats (essentially like milking a cow) and watch for fluid, which may be milk-like or clear (report the nature of any fluid when you submit your sample). Hunters should look for signed drop-off barrels, contact any WDFW employee in the field, or call the Yakima Regional Office to report a sample. Although sample collection will require a little extra effort on your part, you will be helping to assure sound biological management of Washington's elk herds. If you need more information, more detailed directions, or an organ location diagram, please call 509-575-2740 or 509-457-9322.



Heart with Membrane (pericaridium) cut away

Heart covered by membrane and fat deposits

Kidneys covered with fat
Photos: Scott McCorquodale

Scott McCorquodale, Ph.D
Deer and Elk Specialits

Preliminary Outlook Mixed for Duck Production

Preliminary reports from U.S. Fish and Wildlife survey crews in Canada indicate a wide range of habitat conditions for continental duck breeding populations in 2004. In general, it appears that 2004 is a much drier spring in the southern Canadian prairies than last year, and some survey crews reported the driest conditions in a decade. A record late spring in northern Canada significantly delayed waterfowl movements to traditional breeding areas, and persisted into late May. However, significant amounts of rain and snow fell in southern Manitoba and parts of the Dakotas in late May, and renesting / late nesting hens should benefit from the added water.

Washington's major duck production areas had spring conditions earlier than normal, and drought in some areas will lead to a reduced number of local birds available for hunters early in the 2004-05 season. Total mallards in the eastern Washington breeding population were estimated at 39,958, slightly above last year's count (<1%), but remain 27% below the long-term average. Total duck numbers were estimated at 114,883, 10% below 2003's count and 28% below the long-term average. Diver species were the most noticeable in reduced numbers, particularly lesser scaup and ring-necked ducks. Total duck numbers were slightly up (4%) in the wetland habitats within the irrigation projects of the Yakima Valley and the Columbia Basin. The production loss occurred in the dryland areas that depend on snowmelt for recharge of pothole habitats. Pothole numbers were down 35% from 2003 and 36% from the long-term average. Pothole numbers were the lowest since 1994.

Results from continental surveys are used to adjust Pacific Flyway duck season length and bag limits each year in July, and local breeding population information figures into state season selections (within flyway frameworks) at the Fish and Wildlife Commission meeting in August each year.

Don Kraege
Ron Friesz

New Migratory Bird Hunting Authorizations Improve Harvest Estimates

WDFW requires possession of hunting authorizations and harvest report cards when hunting for several species of migratory game birds. Authorizations are required for hunting snow geese and brant in northern Puget Sound, brant in Willapa Bay, and band-tailed pigeons throughout western Washington. Harvests of these species, as well as for sea ducks (scoters, harlequin ducks, and long-tailed ducks), are not surveyed adequately by annual hunter surveys from WDFW and U.S. Fish and Wildlife Service. Relatively low numbers of hunters pursue these species compared to more numerous dabbling ducks and Canada geese, which ongoing mail surveys are designed to address. More accurate harvest information is needed to document all factors affecting these species occurring in Washington, and to provide information for international management programs through the Pacific Flyway Council. Harvest is recorded on harvest report cards, and then returned to WDFW through regular mail or via the WDFW web site:

http://wdfw.wa.gov/wlm/wlm_survey/index.php.

For more information regarding hunting authorizations for migratory birds, please see the 2004-05 waterfowl and upland game pamphlet or call (360) 902-2515.

Don Kraege

Northeast Washington Cougar and Deer Study

Across much of the west mule deer populations have declined. Conversely, white-tailed deer populations have expanded in range and increased in population in many regions, possibly in response to habitat modifications brought about through timber harvest and irrigated agricultural.

When deer numbers decline, deer managers adjust harvest rates or evoke habitat management measures. When deer populations are at their lowest, sportsmen have traditionally switched their attention to the impacts of predators Cougar control has been proposed in some areas as a means to increase deer and elk populations, and decrease risk to the public and their property.

Predator control has been used to reduce deer mortality, however no study has shown a long-term relaxation of predation rates. Once predator control is halted, predator densities frequently recover and predation rates return to pre-control levels. One study found that grey wolves increased by 800% over six years following the cessation of a wolf control program in Alaska. My own research found that in the presence of an overlapping population of whitetails, mule deer experienced a significantly higher predation rate by cougars and therefore population decline, in spite of liberal hunter-harvest of the cougars.

The ***"apparent competition hypothesis"*** predicts that as alternate prey (white-tailed deer) numbers increase, so do numbers of predators, resulting in increased incidental predation on more limited prey (mule deer) sharing the same range. Apparent competition can result in population declines and even localized extinction of native prey in some cases. Such a phenomenon may largely account for declines of mule deer where the two species overlap. I believe that much of the increase in white-tailed deer range and population is due to human induced habitat modifications, and that this increase in whitetails is the foundation for an increase in the cougar population. Further, I believe that through apparent competition this increased white-tailed deer density is resulting in unsustainable cougar predation of mule deer.

I wish to test the hypothesis by conducting a controlled experiment in northeast Washington. I propose to reduce densities of white-tailed deer on treatment areas in consecutive years, and observe changes in cougar predation on mule deer. Mule deer will be divided into treatment and control groups based on their choice of winter range. The number of white-tailed deer in treatment areas will be reduced in late fall and early winter, once the animals have returned to their winter ranges. The number of animals removed will be based on the relative abundance of each species as determined by aerial surveys from the previous spring. White-tailed deer reductions will be accomplished through increased public sport harvest and special permit late season, antlerless hunts in treatment areas, and will be overseen by the WDFW. For the 2004 hunting season, 400 special second white-tailed deer antlerless tags have been allocated within two small zones of Game Management Unit 105. This is called "The Wedge Special Hunt", and includes Deer Areas #1030 (Flat Creek) and #1040 (Summit Lake).

Preliminary Results

Captures and Monitoring: To date 26 cougars have been captured and fitted with radio-collars including 16 adult females, 6 adult males, and 4 juvenile males within Game Management Units 101 and 105. An additional 5 cougars (4 adult females and 1 adult male) from a previous study have been monitored for supplemental population data.

Mortalities: Thirteen of the 31 radio-collared cougars have died over the course of the study. Four animals were taken as part of the public safety hunt to reduce the cougar population. Five animals were taken in legal hunts (3 in British Columbia, and 2 in Washington). One female died of natural causes and one male was shot on a depredation tag after he killed several of a local landowner's sheep. One female died while recovering from the drugs used to tranquilize her and has thus been censored from the data. One collared female is missing and has not been heard since December. As of May 5, 2004, seventeen cougars remain on the air.

Emigration: Three sub-adult male cougars have emigrated south across the Columbia River. One returned to the Wedge and was harvested by an elk hunter. One cougar established a home range in the Onion Creek area and was killed in December as part of the public safety hunt. One cougar continued southeast and is currently 20 miles south of Priest River, ID (74 miles from his maternal home range). Two sub-adult males have traveled north into Canada. One established a home range near Fouqier B.C. (85 miles north of his maternal home range), and the other sub-adult male is now near Cristina Lake, B.C.

Predation: To date we have found 63 deer killed by radio-collared cougars (31 whitetails, 22 mule deer, and 10 unidentified deer species). The average period between kills is 6.9 days (6.3 summer, and 8.1 winter). Although fewer mule deer are being killed, because of their lower abundance, they suffer a higher predation rate. Based on initial indications of prey availability, cougars on a landscape level are strongly selecting for mule deer (statistically highly significant). This selection is less strong when broken down into individual cougar home ranges (i.e. what is available vs. what is selected within an individuals cat's home range). More data is needed to show us if cougars are actually selecting mule deer over whitetails, or if cougars simply range more often within habitat in which mule deer also concentrate.

Hugh Robinson
Ph.D. Candidate
Washington State University

Project CAT: Kids and Community Investigate Cougars

Nestled along the eastern foothills of the Cascades the rural community of Cle Elum has been swept up in change. This once sleepy rural town is caught in the midst of Seattle's urban expansion and is fast becoming a resort destination, and residential community for Puget Sound's economic bloom. It is also becoming a model for community and public school participation, investigating how wildlife and the community will respond to these changes and the steps essential to secure wildlife and the rural character of their backyards.

Students, kindergarteners to seniors, at Cle Elum-Roslyn School District, are helping to investigating wildlife and habitats to document how development will affect the wildlife and the community; a community that has been dependent on the natural resources of this rural environment. Community members, too, volunteer to assist with and supervise student research projects. Young adults to senior citizens share their skills, experiences and enthusiasm; working hand-in-hand with students under the oversight of professional researchers to document current habitat conditions where elk, deer, and cougars roam and how these may respond to changes brought by the seasons and development.

Second graders to 8th graders count deer, elk, and domestic stock, along school bus routes on their way to school. These bus routes serve as permanent- transects from which counts of deer and elk, natural prey for cougars, are monitored during annual seasonal and long-term developmental changes. These students also conduct track counts in the snow of animals that reside near their homes. These counts provide scientists with knowledge on where elk and deer are distributed among residential areas and how this may influence cougar use of habitats and space. Students, too, may spend part of their summers helping scientist develop a map of the forest habitats of the Kittitas Valley. This data is used with satellite imagery to construct a GIS (Geographic Information System) map that will show how deer, elk, cougars and people use habitats.

The secretive life of the cougar is unlocked from cougars captured and marked with GPS (Global Positioning Satellite) collars. During the winter, 9th to 12th grade students spend class time assisting biologist searching the surrounding forests for tracks of these elusive predators. High school students use training in track identification that is introduced in the elementary classroom and practiced in the school's backyard forest as they accompany Department of Fish and Wildlife biologist in search of cougars. Once a fresh cougar track is located, trained hounds are unleashed and a chase is on to catch the cougar. Biologist dart the cougar while students observe from a secure distance. Students help collect and record physical measurements and condition of the cat. The animal is fitted with a radio collar that, besides emitting radio signals, records precise GPS location positions every 6 hours, day and night, each day of the year.

This high-tech view into the cougars travels is merged with the GIS habitats maps to help scientists, students, and community members understand how and where cougars live in relation to deer and elk, and where people live and recreate. This knowledge is the basic ingredient into understanding how wildlife and habitat may respond to the changes occurring as development proceeds. This will help members of the community and the future decision makers of the community, design and promote programs to ensure a safe place for the residence as well as secure a place for wildlife in the future of this changing community.

Gary M. Koehler
Wildlife Research Scientist

Students learning and assisting in Project Cat` Photo: Gary M. Koehler

Columbian White Tailed Deer Introductions In Cowlitz County

The Columbian White tailed Deer, is a State and Federally listed Endangered species. The deer was a native resident as noted by Lewis and Clark in their travels in the area. The clearing of riparian lands for agriculture and un-restricted hunting had reduced the population of Columbia white-tails to a low of 200 to 400 animals early in the 1900's. The Columbia white-tails are divided into two herds—one on 2000-acre Tenasillahe Island reserve in the Columbia River, and one on the Columbian White-Tailed Deer National Wildlife Refuge along the lower Columbia River.

The Columbian white-tailed deer thrived under the protection of these refuges and were even considered to be candidates for down-listing in 1995. But, in February of 1996, both Tenasillahe Island and the mainland deer refuge experienced severe flooding. As a result of these floods, half of the Washington population of Columbia white-tailed deer was lost. Since then, the U.S. Fish and Wildlife Service (USFWS) and the Washington Department of Fish and Wildlife (WDFW) have been working hard to recover these populations. Recently whitetails were re-introduced onto two islands near Longview, WA.

The Columbian whitetails resemble other white-tailed deer from eastern Washington or other areas of the US. The most notable visual characteristic is the white eye-ring, which is present on both females and males. White-tailed deer antlers varies from the local black-tailed deer by all the points coming off of the main beam rather than branching into forks like black-tailed deer or mule deer.

Hunters in the Longview area, particularly Fisher Island, Willow Grove and Barlow Point should be extremely cautious in identifying their deer before shooting. All the transplanted deer were outfitted with colored ear tags, but any young born of those transplanted animals will have no extra marks.

The objective of the transplant is to re-introduce the deer into historical habitat so that it can be considered for delisted from the State and Federal ESA lists. Illegal harvest of these deer will slow or stop this process. Hunters are urged to be extra careful and look carefully for the white eye-ring and antler structure that will confirm identification.

Patrick Miller
District Wildlife Biologist

Cose up of CWTD doe Photo: WDFW

Road Maintenance and Abandonment Plans (RMAPs) on WDFW lands

New rules in the Forest Practices Act approved in May 2001 specifically, WAC 222-24-051, require all forest landowners with 500 or more acres of forest land to develop a Road Maintenance and Abandonment Plan (RMAP) for all their forested land by July 2006. The RMAP requires that all forest roads be identified, their condition assessed, problems that are, or pose a threat to a public resource be identified and provide a schedule of when the problems will be corrected. Annual reports are required through 2015 for each plan submitted that describes the past years work and what is scheduled for the upcoming year.

Recent actions by WDFW resulted in the abandonment of twelve miles of problem road, removal of seven fish passage barrier culverts which opened five miles of stream to fish passage and stream channel restoration on the L.T. Murray, Wenas and W.T. Wooten Wildlife Areas. The abandoned roads were ripped to create a seedbed for native shrubs and grasses that will provide additional forage and habitat for elk, deer and other wildlife (see additional article(s) on elk management and roads). This year (2004) additional road abandonment, fish passage barrier culvert removal, road upgrade and improvement are scheduled for the L.T. Murray, Sherman Creek and Olympic Wildlife Areas.

Lonnie Landrie